Application No. Not Yet Assigned Paper Dated: September 27, 2005 In Reply to USPTO Correspondence of N/A Attorney Docket No. 4544-052909

AMENDMENTS TO THE ABSTRACT

After the claims, please insert a page containing the <u>Abstract Of The Disclosure</u>, which is attached hereto as a separately typed page.

A SYSTEM AND METHOD FOR ON-LINE PROPERTY PREDICTION FOR HOT ROLLED COIL IN A HOT STRIP MILL

ABSTRACT OF THE DISCLOSURE

A system for on-line property prediction for hot rolled coils in a hot strip mill of a steel plant, including a unit for capturing the chemistry from the steel making stage and providing the data on rolling schedule. Field devices are provided at the instrumentation level for measuring process parameters during hot rolling. A programmable logic controller is used for acquiring data of measured parameters from the field devices and feeding the data to a processor. Means is provided for conversion of the measured data from time domain to space domain using segment tracking. A computation module processes the converted space domain data for predicting mechanical properties along the length and through the thickness of the strip being rolled. A display unit displays the predicted properties. The data obtained can be stored in a data warehouse for future use. A unit provided in the system can collect the predicted properties and feed the same to the scheduling unit.